

PATENT

Attorney Docket No. 231119 Client Reference No. E-017-2002/0-US-06

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Boyd et al.

Group Art Unit: Unassigned

U.S. National Phase of PCT/US03/15991

Examiner: Unassigned

Filed: Herewith

For: SCYTOVIRINS AND RELATED

CONJUGATES, FUSION PROTEINS, NUCLEIC ACIDS, VECTORS, HOST

CELLS, COMPOSITIONS,

ANTIBODIES, AND METHODS OF

**USING SCYTOVIRINS** 

## INFORMATION DISCLOSURE STATEMENT

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

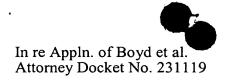
Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

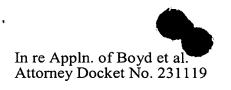
The Information Disclosure Statement is being filed:





$\boxtimes$	within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.
	after (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes <i>one</i> of:
	the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
	the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).
	after the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
	after the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and within thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).  NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.
Copie	s of the References
	Copies of all of the references listed on the enclosed Form 1449 are enclosed herewith.
$\boxtimes$	Copies of U.S. patents and patent applications that are listed on the accompanying Form 1449 are not enclosed herewith. Copies of other references identified on the accompanying Form 1449 are enclosed herewith.
	Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).
M	A copy of the foreign search report is enclosed herewith

	parent application(furnished at that to submitted herewith The Examiner is accordance with the Procedure. In accordance upon for ar	ed on the enclosed Forms) of the present application. Accordingly, add a so as not to burden the respectfully requested the requirements set our dance with 37 CFR 1.98 a earlier filing date undeviously furnished are set	ation, and coplitional copies of file with dup to carefully at in the Ma (d), the details der 35 USC 1	pies of the reference of the reference of the reference of the parer	references were erences are not s of references. references in ent Examining at application(s)
	U.S. APPLI	CATIONS	Sı	atus (check o	ne)
U.	S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.	<u> </u>	3,3,1,2,1,1,2			
2.					
3.					
Stater	Information Disclering patent office months prior to the The undersigned Information Disclering in a counter undersigned after in Information Disclering Disclering Information Discler	hereby states that each osure Statement was fince in a counterpart foreign filing of the Information hereby states that no sure Statement was cited or part foreign patent appropriate making reasonable inquirosure Statement was known than three months	rst cited in a gn patent apple Disclosure St item of infinite a community, no item of item on any	iny commun lication not ratement.  ormation contaction from to the known information or individual	ntained in the a foreign patent owledge of the contained in the designated in
Stater	nent under 37 CFR	1.704(d)			
	Information Disclo office in a counter any individual desi	hereby states that each sure Statement was cited part application and that gnated in 37 CFR 1.56(d) Disclosure Statement.	in a communition this commun	ication from ication was	a foreign patent not received by
Fees					
$\boxtimes$	No fee is owed by the IDS Fee of \$12	the applicant(s). 80 under 37 CFR 1.17(p)	is enclosed he	erewith.	



## **Method of Payment of Fees**

	Attached is a check in the amount of \$ Charge Deposit Account No. 12-1216 in the amount of \$ this communication is enclosed for that purpose.)  (A duplicate copy of
Autho	orization to Charge Additional Fees
$\boxtimes$	If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)
Instru	actions as to Overpayment
$\boxtimes$	Credit Account No. 12-1216. Refund

David J. Schodin, Reg. No. 41,294 LEYDIG, VOIT & MAYER, LTD. Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, Illinois 60601-6780 (312) 616-5600 (telephone) (312) 616-5700 (facsimile)

Date: November 10, 2004





Substitute	for	form	1449A/B/PTO

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number	Unassigned U/D][SYD]
Filing Date	Herewith
First Named Inventor	BOYD et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	231119

		U.S. Patent Do	cument			·- ·-
Examiner Initials	Doc. No.	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
	AA	5,314,995		Fell, Jr. et al.	May 24, 1994	
	ΑВ	5,821,081		Boyd et al.	Oct. 13, 1998	
	AC	5,843,882		Boyd et al.	Dec. 1, 1998	
	AD	5,962,653		Boyd et al.	Oct. 5, 1999	
	ΑE	5,962,668		Boyd et al.	Oct. 5, 1999	
	AF	5,998,587		Boyd et al.	Dec. 7, 1999	
	AG	6,015,876		Boyd	Jan. 18, 2000	
	АН	6,245,737	B1	Boyd et al.	Jun. 12, 2001	
	ΑI	6,428,790	B1	Boyd	Aug. 8, 2002	<u> </u>

		·		FORE	IGN PATENT DOCUMENTS			
		F	oreign Patent Documer	nt			Trans	slation
Examiner Initials	Doc. No.	Office	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Yes	No*+
	AJ	wo	93/06216		Oklahoma Medical Research Foundation	Apr. 1, 1993		

		OTHER - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Yes	No*+
•	AK	AGNEW et al., Sex. Trans. Dis., 22(5), 269-273 (1995)		
	AL	AMON et al., The Plant Cell, 10, 781-789 (1998)		
	ΑM	ANDORFER et al., <i>J. Insect Phys.</i> , 46, 365-372 (2000)		
	AN	ANDREU et al., J. Infect. Dis., 171, 1237-1243 (1995)		
	AO	AULLO et al., <i>EMBO J.</i> , 11(2), 575-583 (1992)		
	AP	BALZARINI et al., Antiviral Res., 18, 191-207 (1992)		
	AQ	BERZOFSKY, J. Acquired Immune Deficiency Syndromes, 4, 451-459 (1991)		
	AR	BOLMSTEDT et al., Mol. Pharmacology, 59(5), 949-954 (2001)		
	AS	BOYD et al., Antimicrob. Agents Chemother., 41(7), 1521-1530 (1997)		
	ΑТ	BOYD, AIDS Etiology, Diagnosis, Treatment, and Prevention, 2 <sup>nd</sup> Ed., 305-317 (1988)		
	AU	BOYD et al., J. Med. Chem., 37, 1740-1745 (1994)		
	AV	BRUCE et al., Can. J. Microbiol., 34, 339-343 (1988)		
	AW	BUCKHEIT et al., Antiviral Res., 21, 247-265 (1993)		
	AX	CAMMACK, Curr. Opin. Infect. Dis., 14, 13-16 (2001)		
	AY	CAPON et al., Annu. Rev. Immunol., 9, 649-678 (1991)		
	ΑZ	CAPON et al., Nature, 337, 525-531 (1989).		
	ВА	CARONE et al., J. Lab. Clin. Med., 100(1), 1-14 (1982)		
	BB	CARTER et al., J. Org. Chem., 49, 236-241 (1984)		
	ВС	CHARAN et al., J. Nat. Prod., 63, 1170-1174 (2000)		
	ВD	CHAUDHARY et al., The Human Retroviruses, Ch. 18, 379-387 (1991)		

Evaminar Signatura	Date Considered
Examiner Signature	Date Considered
1	l i

<sup>\*</sup> A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

<sup>+</sup> An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).





DT ec'd PCT/PTO	9	0	NOV 2004	

					Complete if Known 513961
Substitute for form 1449A/B/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use as many sheets as necessary) Sheet 2 of 3	Application Number	Unassigned 4 0 7 5 1 5 9 0 1			
INEC	MATION	nisc	MOSIBE	Filing Date	Herewith
				First Named Inventor	BOYD et al.
SIA	STATEMENT BY APPLICAN	PLICANI	Group Art Unit	Unassigned	
	(Use as many sheet	s as ned	cessary)	Examiner Name	Unassigned
Sheet	2	of	3	Attorney Docket Number	231119

Eveniner	Doo	OTHER - NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book,	Tran	slation
Examiner Initials	Doc. No.	magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Yes	No**
	BE	CHAUDHARY et al., <i>Nature</i> , 335, 369-372 (1988)		
	BF	CLANTON et al., J. Acquired Immune Deficiency Syndromes, 5, 771-781 (1992)		
	BG	COFFIN, Science, 267, 483-489 (1995)		
	вн	COHEN, Science, 267, 179 (1995)		
	BI	CRESSWELL et al., Algal and Cyanobacterial Biotechnology, 211-218 (1989)		
	ВJ	DAVEY et al., <i>J. Infect. Dis.</i> , 170, 1180-1188 (1994)		
	ВK	DAVIS, J. Pharm. Pharmacol., 44(Suppl. 1), 186-190 (1992)		
	ВL	DE CLERCQ, Adv. In Virus Res., 42, 1-55 (1993)		
	ВМ	DE CLERCQ, J. Acquired Immune Deficiency Syndromes, 4(3), 207-218 (1991)		
	BN	DOES et al., Plant Mol. Biol., 39, 335-347 (1999)		
	во	DORSEY et al., Protease Inhibitors in AIDS Therapy, Ch. 4, 65-84		
	BP	DUNCAN et al., Protease Inhibitors in AIDS Therapy, Ch. 2, 27-48		
	BQ	ELMER et al., JAMA, 275(11), 870-876 (1996)		
	BR	FAULKNER, Nat. Prod. Rep., 355-394 (1994)		
,	BS	FLINT et al., Virlogy Molecular Biology, Pathogenesis, and Control, Ch. 19, 662-714 (2000)		
	ВТ	FRANKMOLLE et al., J. Antibiotics, 45(9), 1451-1457 (1992)		
	ВU	FREED et al., Bull. Inst. Pasteur., 88, 73-110 (1990)		
	BV	FUNG et al., J. Immunology, 145(7), 2199-2206 (1990)		
	BW	GARTNER et al., Techniques in HIV Research, Ch. 3, 59-63 (1994)		
	вх	GULAKOWSKI et al., J. Virol. Methods, 33, 87-100 (1991)		
	BY	GUSTAFSON et al., J. Med. Chem., 35, 1978-1986 (1992)		
	ΒZ	HARATA et al., J. Mol. Biol., 297, 673-681 (2000)		
	СА	HILIER et al., Clin. Infect. Dis., 16(Suppl 4), S273-S281 (1993)		
	СВ	HOLS et al., Appl. and Environ. Microbiol., 60(5), 1401-1413 (1994)		
	СС	HUSSON et al., J. Pediatr., 121(4), 627-633 (1992)		
	CD	KASHMAN et al., J. Med. Chem., 35, 2735-2743 (1992)		
	CE	KEMPTF, Protease Inhibitors in AIDS Therapy, Ch. 3, 49-64		
	CF	KILBY et al., Nature Medicine, 4(11), 1302-1307 (1998)		
	CG	KRISHNAMURTHY et al., PNAS USA, 86, 770-774 (1989)		
	СН	LANGNER et al., Arch. Virol., 130, 157-170 (1993)	_	
	СІ	LIFSON et al., J. Exp. Med., 164, 2101-2106 (1986)		
	CJ	LIN et al., Animicrob. Agents Chemother., 33(12), 2149-2151 (1989)		
	СК	LIOU et al., <i>Biochemistry</i> , 38, 11415-11424 (1999)		-
	CL	LIPTON, <i>Nature</i> , 367, 113-114 (1994)		
	CM	MATSUSHITA et al., <i>J. Virology</i> , <i>62(6)</i> , 2107-2114 (1988)		
	CN	MCGROARTY, FEMS Immunol. Med. Microbiol., 6, 251-264 (1993)		
	CO	MERIGAN, Amer. J. Med., 90(Suppl. 4A), 8S-17S (1991)		<del></del>
	CP	MICHALOWSKI et al., <i>Nucleic Acids Res.</i> , <i>18(8)</i> , 2186 (1990)		-
	ca	MITSUYA et al., <i>Science</i> , 249, 1533-1544 (1990)		

ĺ	Examiner Signature	Date Considered	

<sup>\*</sup> A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

<sup>+</sup> An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).





DT Rec'd PCT/PTO 1 0 NOV 2004

Substitute for form 1449A/B/PTO				Application Number Unassigned Unassigned		
				Application Number	Unassigned 3 U75 5 90 I	
IMEC	RMATION I	nisc	1 OSUBE	Filing Date	Herewith	
				First Named Inventor	BOYD et al.	
STATEMENT BY APPLICANT				Group Art Unit	Unassigned	
(Use as many sheets as necessary)		Examiner Name	Unassigned			
Sheet	3	of	3	Attorney Docket Number	231119	

Examiner	OTHER - NON PATENT LITERATURE DOCUMENTS  aminer Doc. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book			Translation	
Initials	No.	magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Yes	No*1	
	CR	MOORE et al., <i>J. Virology</i> , <i>66(1)</i> , 235-243 (1992)			
-	CS	MORGAN et al., AIDS Research and Human Retroviruses, 10(11), 1507-1515 (1994)	<u> </u>		
	CT	OKINO et al., Tetrahedron Ltrs., 34(3), 501-504 (1993)			
	CU	ORLOFF et al., AIDS Research and Human Retroviruses, 11(3), 335-342 (1995)			
	CV	PATTERSON et al., <i>J. Phycol.</i> , 27, 530-536 (1991)			
	cw	PATTERSON et al., <i>J. Phycol.</i> , 29, 125-130 (1993)			
	СХ	POLSKY et al., Contraception, 39(6), 579-587 (1989)			
	CY	RAMACHANDRAN et al., JID, 170, 1009-1013 (1994)			
	CZ	REDONDO-LOPEZ et al., Reviews Infect. Dis., 12(5), 856-872 (1990)			
	DA	REICH, Protease Inhibitors in AIDS Therapy, Ch. 5, 85-99			
	DΒ	REID et al., Clinical Microbiol. Reviews, 3(4), 335-344 (1990)			
***	DC	ROSENBERG et al., Amer. J. Pub. Health, 82(11), 1473-1478 (1992)			
	DD	ROSENBERG et al., Sexually Transmitted Diseases, 20(1), 41-44 (1993)			
	DE	ROYER et al., Pharmacol. Res., 24(4), 407-412 (1991)			
	DF	RUMBELI et al., FEBS Ltrs., 221(1), 1-2 (1987)			
	DG	SATTENTAU et al., AIDS, 2(2), 101-105 (1988)			
	DH	SCHAEFFER et al., Ecotoxicology and Evironmental Safety, 45, 208-227 (2000)			
	DI	SCHOOLEY et al., Annals of Internal Medicine, 112(4), 247-253 (1990)			
	DJ	SHENOY et al., J. Pharmacol. Exp. Ther., 297(2), 704-710 (2001)			
	DK	SHERMAN et al., The Cyanobacteria, Ch. 1, 1-33 (1987)			
	DL	SHIH et al., PNAS USA, 88, 9878-9882 (1991)			
	DM	SIVONEN et al., Chem. Res. Toxicol., 5(4), 464-469 (1992)			
	DN	SUTER et al., FEBS Ltrs., 217(2), 279-282 (1987)			
	DO	SWANSON et al., J. Biol. Chem., 267(23) 16146-16154 (1992)			
	DP	TAYLOR, J. NIH Res., 6, 26-27 (1994)			
	DQ	THEIβ et al., Meth. Find. Exp. Clin. Pharmacol., 13(5), 353-359 (1991)			
	DR	TILL et al., Science, 242, 1166-1168 (1988)			
	DS	TRAUNECKER et al., <i>Nature</i> , 339, 68-70 (1989).			
	DT	TUNG et al., Protease Inhibitors in AIDS Therapy, Ch. 6, 101-118			
	DU	VERHOEF et al., Eur. J. Drug Metab. Phartmacokinet., 15(2), 83-93 (1990)			
	DV	WALLACE et al., Science, 260, 912-913 (1993)			
	DW	WEISLOW et al., J. Natl. Cancer Inst., 81(8), 577-586 (1989)			
	DX	WHITE et al., Antiviral Res., 16, 257-266 (1991)			
	DY	WUNSCH, Biopolymers, 22, 493-505 (1983)			
	DΖ	YEH et al., PNAS USA, 89, 1904-1908 (1992)		-	
	EΑ	ZAGHOUANI et al., PNAS USA, Vol. 88, 5645-5649 (1991)			
			_		

ſ	Examiner Signature	Date Considered	

<sup>\*</sup> A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

<sup>+</sup> An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).